

UNITED STATES PATENT AND TRADEMARK OFFICE



PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/845,006	04/27/2001	Hansgeorg Schindler	SONN:010US/MBW	1473
7	7590 04/21/2004		EXAM	INER
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			1639	

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/845,006	SCHINDLER, HANSGEORG			
		Examiner	Art Unit			
		Jon D Epperson	1639			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
THE I - Exter after - If the - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply or period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on 26 Ja	nuary 2004.				
2a)⊠	This action is FINAL . 2b) This	action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 24-45 and 61 is/are pending in the ap 4a) Of the above claim(s) 41 and 43 is/are with Claim(s) is/are allowed. Claim(s) 24-40,42,44,45 and 61 is/are rejected Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	drawn from consideration.				
Applicati	on Papers					
9)[The specification is objected to by the Examine	r.				
10)	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority u	ınder 35 U.S.C. § 119					
a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureausee the attached detailed Office action for a list	s have been received. s have been received in Application tity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment	t(s)					
	e of References Cited (PTO-892)	4) Interview Summary				
3) 🔲 Inforn	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	ite atent Application (PTO-152)			

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DETAILED ACTION

Status of the Application

1. The Response filed January 26, 2004 is acknowledged.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Status of the Claims

- 3. Claims 24-60 were pending. Applicants canceled claims 46-60, added claim 61 and amended claims 24-31, 34-35, 38-39 and 41-45. Therefore, claims 24-45 and 61 are currently pending.
- 4. Claims 41 and 43 are drawn to non-elected species and/or inventions and thus these claims remain withdrawn from further consideration by the examiner, 37 CFR 1.142(b), there being no allowable generic claim.
- 5. Therefore, claims 24-40, 42, 44-45 and 61 are examined on the merits in this action.

Priority

6. Acknowledgement is made of applicants' claim for priority under PCT/AT/99/00257. However, the priority date of 10/28/1999 has not been granted due to the lack of an English

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translation (e.g., see MPEP § 201.15). Therefore, the effective filing date of the claims is the filing date of the case i.e., October 28, 1999.

Withdrawn Objections/Rejections

7. The objections to the claims and/or specification are withdrawn in view of Applicant's amendments thereto. The rejection under 35 U.S.C. § 101 is withdrawn in view of Applicant's arguments and/or amendments. With respect to the rejections under the second paragraph of 35 U.S.C. 112, the rejections denoted A-F and H are withdrawn in view of applicant's amendments to the claims and/or cancellation of claims. The Schmidt et al. rejection under 35 U.S.C. 102(b) is withdrawn in view of Applicant's arguments and/or amendments. All other rejections are maintained and the arguments are addressed below.

Outstanding Objections and/or Rejections

Claims Rejections - 35 U.S.C. 112, second paragraph

- 8. Claims 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - A. Withdrawn.
 - B. Withdrawn.
 - C. Withdrawn.
 - D. Withdrawn.
 - E. Withdrawn.

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F. Withdrawn.

G. For claim 26, the term "equal marker" is vague and indefinite. For example, it is not clear what "equal" refers to i.e., there is no basis for determining the equality? For example, does Applicant mean that the "markers" are "equal" because they have the same structure i.e., "equal" structures. Does Applicant mean that the "markers" the "equal" because they fluoresce with "equal" intensity or provide emit an "equal" wavelength of light? Applicants are requested to clarify. Therefore, claims 26 and all dependent claims are rejected under 35 U.S.C. 112, second paragraph.

H. Withdrawn.

Response

- 9. Applicant's arguments directed to the above 35 U.S.C. 112, second paragraph rejections were fully considered (and are incorporated in their entirety herein by reference) but were not deemed persuasive for the following reasons. Please note that the above rejection has been modified from it original version to more clearly address applicants' newly amended and/or added claims and/or newly amended arguments.
 - G. Applicant argues that the specification makes clear "that all marker molecules are the same" and cites *Interactive Gift Express, Inc. v. Compuserve Inc.* and *Hoechst Celanese Corp. v. BP Chems. Ltd.* in support of this position (e.g., 1/26/2004 Response, page 10, last paragraph).

This is not found persuasive for the following reasons:

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The Examiner contends that Applicants arguments simply substitute one vague term for another (e.g., it is not clear what "equal" or the "same" refers to i.e., there is no basis for making these comparisons). For example, does Applicant mean that the "markers" are "equal" or the "same" because they have the "same" or "equal" structures or does Applicant mean that the "markers" are "equal" or the "same" because they fluoresce with "equal" or the "same" intensity or emit an "equal" or the "same" wavelength of light? The Examiner contends that the specification and claims do not provide a basis to make this comparison and notes that Applicant has not pointed to any section in the specification that would remedy this defect.

Accordingly, the 35 U.S.C. 112, second paragraph rejections cited above are hereby maintained.

Claims Rejections - 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 10. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

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international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 24-32, 34-38, 42, 44-45 and 61 are rejected under 35 U.S.C. 102(a) as being anticipated by Steyer et al. (Steyer, J.A.; Almers, W. "Tracking Single Secretory Granules in Live Chromaffin Cells be Evanescent-Field Fluorescence Microscopy" *Biophysical Journal* April 1999, 76, 2262-2271).

For *claims 24*, *61*, Steyer et al. (see entire document) discloses materials and methods including epifluorescence microscopy for analyzing secretory granules beneath the plasma membrane of chromaffin cells (see Steyer et al., abstract), which anticipates claim 24. For example, Steyer et al. disclose a least one source of light adapted to fluorescently excite via single or multiple photon absorption, marker molecules in the sample (e.g., see Steyer et al., abstract wherein laser is discloses). Steyer et al. further discloses a detection and analysis system comprising a charged coupled device (CCD) camera. Steyer et al. further discloses the "microscope stage" of the epifluorescence microscope i.e., the stage of the Zeiss-Axiovert with x-y movements (e.g., see page 2263, column 1, Materials and Methods section). Finally, Steyer et al. disclose a control unit for coordinating and synchronizing illumination times and movements of at least one of said sample (e.g., see Steyer et al., Materials and Methods, "we moved the objective lens 300 nm upward, using a calibrated piezoelectric drive; see also page 2264, column 1,

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paragraph 1 wherein Steyer et al. disclose a calibrated piezoelectric drive (PIFOC P-721.10; Physik Instrumente, Waldbronn, Germany) to control movements of the objective with respect to the sample).

For *claim 25*, Steyer et al. disclose visualization of secretory granules and chromaffin cells and thus the arrangement must have been "adapted" to visualize these elements (e.g., see abstract).

For *claim 26*, Steyer et al. disclose green fluorescent beads (280 nm diameter) (e.g., see Figure 2).

For *claim 27*, Steyer et al. disclose "marker" beads that have different fluorescent intensities (e.g., see figure 2).

For *claim 28*, Steyer et al. disclose software-controlled shutter (Uniblitz; Vincent Associates, Rochester, NY) that opened only during camera exposure (e.g., see page 2263, column 2, paragraph 1).

For *claims 29-30*, Steyer et al. does not explicitly state that "lateral" and "vertical" movements are coordinated but Steyer et al. uses the same "epifluorescence microscope" and "normal sample holding means" as that elected by Applicant (e.g., see Paper No. 9, species election). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The Office does not have the facilities to make such a comparison and the burden is on the applicants to establish the difference. See *In re Best*, 562 F.2d 1252,

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195 USPQ 430 (CCPA 1977) and *Ex parte Gray*, 10 USPQ 2d 1922 1923 (PTO Bd. Pat. App. & Int.).

Furthermore, Steyer et al. disclose controlled vertical movements via the use of the piezoelectric device (e.g., see page 2264, column 1, paragraph 1)

For *claim 31*, Steyer et al. disclose further coordinating and synchronizing positioning and shifting of images to each sample position on a pixel array of said CCD cameral (e.g., see Steyer et al., Materials and Methods, "we moved the objective lens 300 nm upward, using a calibrated piezoelectric drive"; see also page 2264, column 1, pargraph 2 wherein the shutter is "coordinated" and "synchronized").

For *claims 32,34*, Steyer et al. disclose an Ar⁺ laser (e.g., see Steyer et al., figure 1).

For *claim 35*, Steyer et al. disclose an Ar+ laser that can generate 5 ms pulses (e.g., see Steyer et al., Materials and Methods).

For *claim 36*, Steyer et al. disclose both continuous and frameshift modes (e.g., see Steyer et al., Materials and Methods; see also Image collection).

For *claim 37-38*, Steyer et al. disclose an epifluorescence microscope with >3% efficiency (e.g., see Steyer et al., Materials and Methods).

For *claim 42*, Steyer et al. disclose a glass slide, but any support commonly used in the field including a microtiter plate would be immediately envisioned.

For *claim 44*, Steyer et al. disclose a piezo element (e.g., see Steyer et al., Materials and Methods, "we moved the objective lens 300 nm upward, using a calibrated piezoelectric drive; see also page 2264, column 1, paragraph 1 wherein Steyer et al.

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disclose a calibrated piezoelectric drive (PIFOC P-721.10; Physik Instrumente,

Waldbronn, Germany) to control movements of the objective with respect to the sample

For *claim 45*, Steyer et al. disclose the same Axiovert 135-TV Zeiss microscope as that disclose in Applicant's preferred embodiments (e.g., see Example 1 in Specification) and, as a result, must possess the same parallel beam region. "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The Office does not have the facilities to make such a comparison and the burden is on the applicants to establish the difference. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and *Ex parte Gray*, 10 USPQ 2d 1922 1923 (PTO Bd. Pat. App. & Int.).

Response

12. Applicant's arguments directed to the above 35 U.S.C. § 102 rejection were fully considered (and are incorporated in their entirety herein by reference) but were not deemed persuasive for the following reasons. Please note that the above rejection has been modified from it original version to more clearly address applicants' newly amended and/or added claims and/or arguments.

Applicant argues that Streyer is not prior art because Applicant should be afforded the a priority date of October 28, 1988 for PCT/AT99/00257.

This is not found persuasive for the following reasons:

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The Examiner contends that Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Accordingly, the 35 U.S.C. 102 rejection cited above is hereby maintained.

13. Claims 24-32, 34-35, 37-38, 43 and 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Eriksson et al. (U.S. Patent No. 6,388,746).

For *claim 24*, Eriksson et al. (see entire document) discloses materials and methods for "high sensitivity" detection of fluorescent molecules (see Eriksson et al., abstract), which anticipates claim 24. For example, Eriksson et al. disclose a least one source of light adapted to fluorescently excite via single or multiple photon absorption, marker molecules in the sample (e.g., see Abstract wherein Eriksson discloses a laser including laser dyes; see column 3, line 24; see also claim 21). Eriksson et al. further discloses a highly sensitive detection and analysis system comprising a charged coupled device (CCD) camera (e.g., see column 6, lines 9-10). Eriksson et al. further discloses the "microscope stage" and a "three dimensional" translation stage controlled by a computer (column 15, line 6-10; see also column 11, line 53; see also column 12, line 8; column 12, line 51). Finally, Eriksson et al. disclose a control unit for coordinating and synchronizing illumination times and movements of at least one of said sample (e.g., see Eriksson et al., column 14, line 18).

Eriksson et al., column 10, line 52).

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For *claim 25*, Eriksson et al. disclose visualization of cells (e.g., see column 1, line 24; see also column 7, line 24) and, as a result, must have been "adapted" to visualize said cells.

For *claim 26*, Eriksson et al. disclose latex beads with approximately 100 equivalent fluorescent molecules (e.g., see Example 1).

For *claim 27*, Eriksson et al. also discloses different markers that can be eletrophoretically separated (e.g., see column 12, last paragraph).

For *claim 28*, Eriksson et al. disclose the coordination and synchronization of 5 ms Gaussian-shaped laser beam pulses of 6.1 µm width and 57 kW/cm2 mean excitation intensity taken at 35 ms intervals (e.g., see Figures 1,3).

For *claims 29-31, 61*, Eriksson et discloses a computer controlled 3D stage and computer control of shutter speeds (column 15, line 6-10; see also column 11, line 53; see also column 12, line 8; column 12, line 51)

For *claims 32,34*, Eriksson et al. disclose lasers like dye lasers (e.g., see abstract). For *claim 35*, Eriksson et al. disclose coordinated CO₂ laser pulses (e.g., see

For *claim 37-38*, Eriksson et al. disclose an epifluorescence microscope with >3%

For *claim 43*, Eriksson et al. disclose a "flow through" cell (e.g., see Eriksson et al., Title, abstract; column 4, line 44; see also column 5, line 23; see also figure 8).

efficiency (e.g., see Eriksson et al., page 2926, column 1, last paragraph).

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Response

14. Applicant's arguments directed to the above 35 U.S.C. § 102 rejection were fully considered (and are incorporated in their entirety herein by reference) but were not deemed persuasive for the following reasons. Please note that the above rejection has been modified from it original version to more clearly address applicants' newly amended and/or added claims and/or arguments.

Applicant argues that the 102(e) date for Eriksson is February 5, 1999 in accordance with the former version of 35 U.S.C. 102(e) and cites MPEP § 706.02(a) in support of this position.

Applicant further argues that Eriksson is not prior art because Applicant should be afforded the priority date of October 28, 1988 for PCT/AT99/00257, which is before the February 5, 1999 102(e) date of Eriksson (e.g., see 1/26/2004 Response, page 11-13).

This is not found persuasive for the following reasons:

The Examiner agrees with Applicant that the proper 102(e) date for Eriksson is February 5, 1999 and apologizes for inadvertently citing the wrong provision. However, the Examiner contends that Eriksson still qualifies as prior art because Applicants have not been afforded the 10/28/1998 foreign priority date and thus the February 5, 1999 102(e) date of Eriksson is still before Applicant's 10/28/1999 filing date. The Examiner further notes that Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Accordingly, the 35 U.S.C. 102 rejection cited above is hereby maintained.

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New Rejections

Claims Rejections - 35 U.S.C. 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 15. Claims 24 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed had possession of the claimed invention. This is a new matter rejection.
 - A. In newly amended claim 24, Applicant removed the limitation for "large area fluorescence excitation", to the extent that the removal of this limitation increases the breadth of the claim (e.g., the claim is no longer limited to just "large area" fluorescence excitation), the increased breadth of possible modification constitutes new matter, since there is no specification support or original claim support for such scope; nor has applicant provided any indication where such support exists i.e., the specification does not provide support for "small" area fluorescence excitation that would be encompassed by the current claims.

Claims Rejections - 35 U.S.C. 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for 16. failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - For *claims 25*, the newly added limitations (e.g., "adapted to visualize ...") does I. not appear to further limit the claimed apparatus. This is because the added limitation represents "intended use" language that is not afforded any patentable weight. Note that an intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. In re Casey, 370 F.2d 576, 152USPQ 235 (CCPA) 1967); In re Otto, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA1963). Here, no such manipulative difference is present and, as a result, the claim does not further limit claim 24 from which it depends. If Applicant believes this rejection is in error, Applicant must disclose what "structural features" said intended use language imparts to the claimed invention. Thus, the metes and bounds of the claimed invention cannot be determined.

Claims Rejections - 35 U.S.C. 102

Claims 24-28, 31-34 and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by 17. Sharonov et al. (Sharonov, S.; Chourpa, I.; Morjani, H.; Nabiev, I.; Manfait, M. "Confocal

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spectral imagining analysis in studies of the spatial distribution of antitumor drugs within living cancer cells" *Analytica Chimica Acta* 290 (1994) 40-47.).

For claims 24, 61, Sharonov et al. (see entire document) disclose an apparatus for confocal spectral imaging analysis (see Sharonov et al, abstract; see also figure 2), which anticipates claims 24 and 61. For example, Sharonov et al. disclose at least one source of light adapted to fluorescently excite, via single or multiple photon absorption marker molecules in said sample (e.g., see figure 2, element 1 wherein a laser (Spectra-Physics Model 2026) is disclosed as the light source; see also abstract wherein both bound and unbound doxorubicin and mitoxantrone are disclosed and the marker molecules inside the K562 cancer cells; see also figures 4-5). In addition, Sharonov et al. disclose a sample holder (e.g., see figure 2, element 5). Sharonov et al. also disclose a detection and analysis system comprising a charged coupled device (CCD) camera (e.g., see figure 2, element 8). Sharonov et al. also disclose a detection and analysis system and a sample holder that are movable laterally relative to each other during use (e.g., see figure 2, elements 2 and 6; see also page 42, last paragraph, "The sample compartment is moved with an automatic scanning stage ... and can be scanned along the y-axis [i.e., laterally] with a minimum step size of 0.1 um. The scanning of the sample along the x-axis is achieved by the optical scanner being installed in the confocal entrance chamber"). Sharonov et al. also disclose a control unit that is adapted to coordinate and synchronize illumination times and lateral movement between said sample holder and said detection and analysis system (e.g., see figure 2, elements 6 and 9; see also page 42, column 1,

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paragraph 2 wherein an IBM PC/AT-486 is disclosed, "The scanning of the sample stage and mirrors of the optical scanner and all operations connected with recording of spectra are computer-controlled (IBM PC/AT-486) by the ImageSoft software through the network between the IBM PC/AT and the RISC 6000 work station"; see also page 42, column 2, paragraphs 2-5; see also figure 3).

For *claim 25*, Sharonov et al. disclose an apparatus that can visualize interactions between molecules and molecular processes in biological cells (e.g., see figure 4, especially figure 4c-d wherein drug binding interactions were demonstrated for mitoxantrone in the nuclear inclusions).

For *claim 26*, Sharonov et al. disclose equal marker molecules (e.g., see figure 4 wherein mitroxantrone is shown in both the nuclear membrane and in the cytoplasm, DNA-bound mitoxantrone is also shown; see also maintained 35 U.S.C. 112, second paragraph rejection).

For *claim 27*, Sharonov et al. disclose different marker molecules (e.g., see figure 4 wherein both "bound" and "unbound" mitroxantrone are shown; compare also figures 4-5 wherein both doxorubicin and mitoxantrone are used; see also figure 1; see also maintained 35 U.S.C. 112, second paragraph rejection).

For *claim 28*, Sharonov et al. disclose adjusting the wave length during use from 457.9 to 514.5 nm (e.g., see page 42, column 2, paragraph 1).

For *claim 31*, Sharonov et al. disclose a control unit that is adapted to coordinate and synchronize positioning and shifting of images to each sample position on a pixel

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array of said CCD camera (e.g., see page 41, column 2, second to last paragraph; see also page 42, column 2, paragraphs 2-3; see also page 43, column 1, paragraph 2).

For claim 32, Sharonov et al. disclose a laser (e.g., see figure 2, element 1).

For *claims 33-34*, Sharonov et al. disclose an acousto-optically switchable laser (e.g., see page 42, paragraph bridging columns 1-2 wherein a switchable Spectra-Physics Model 2026 is disclosed).

For *claim 41*, Sharonov et al. disclose the visualization of a library of antitumour drugs both bound and unbound in cancer cells e.g., doxorubicin and mitoxantrone (e.g., see figures 4-5).

Conclusion

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon D Epperson whose telephone number is (571) 272-0808. The examiner can normally be reached Monday-Friday from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571) 272-0811. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-0811.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jon D. Epperson, Ph.D. April 18, 2004

BENNETT CELSA PRIMARY EXAMINER